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CLMPTO

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1. An information processing apparatus comprising:

generating means for generating ClipMark formed by a mark specifying a characteristic picture extracted from an input AV stream, as management information for supervising the AV stream, and for generating PlayListMark, formed by marks pointing to a picture optionally specified by a user, from a reproduction domain corresponding to the PlayList defining the combination of preset domains in said AV stream; and

recording means for recording said ClipMark and PlayListMark as respective independent tables on a recording medium.

2. The information processing apparatus according to claim 1 wherein said generating means generates said ClipMark and said PlayListMark as a ClipInformation file and as a PlayList file, respectively.

Please cancel claim 3

4. The information processing apparatus according to claim 1 wherein, in reproducing said PlayList, said mark forming the ClipMark of said AV stream corresponding to the reproduction domain of said PlayList is referenced.

5. The information processing apparatus according to claim 1 wherein said mark of the PlayListMark includes presentation time stamp and the identification information

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for indicating one reproduction domain specified on said AV stream data forming the reproduction route of said PlayList.

6. The information processing apparatus according to claim 1 wherein said mark forming the ClipMark or said mark forming said PlayListMark includes the information specifying an entry point of an elementary stream.

7. The information processing apparatus according to claim 1 wherein said mark of the PlayListMark includes the information of the type at least including the Resume point of the start point of a favorite scene or a Resume point of the PlayList specified by a user.

8. The information processing apparatus according to claim 1 wherein said mark of the ClipMark and said mark of the PlayListMark are represented by an address of a relative source packet corresponding to an entry point of said AV stream.

9. The information processing apparatus according to claim 8 wherein said mark of the ClipMark and said mark of the PlayListMark are represented by a first address of a relative source packet corresponding to an entry point of said AV stream and by a second address of an offset from said first address, respectively.

10. The information processing apparatus according to claim 1 further comprising:

type detection means for detecting the type of said characteristic picture detected at the time of recording by said first recording means;

said first recording means recording said mark forming said ClipMark and said type as detected by said detection means.

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11. The information processing apparatus according to claim 1 wherein said mark of said ClipMark includes a scene change point, a commercial start point, commercial end point or a title displaying scene.

12. An information processing method comprising:

a step of generating ClipMark formed by a mark specifying a characteristic picture extracted from an input AV stream, as management information for supervising the AV stream, and of generating PlayListMark, formed by marks pointing to a picture optionally specified by a user, from a reproduction domain corresponding to the PlayList defining the combination of preset domains in said AV stream; and

a step of recording said ClipMark and PlayListMark as respective independent tables on a recording medium.

13. A recording medium having recorded thereon a computer-readable program, said computer-readable program including

a step of generating ClipMark formed by a mark specifying a characteristic picture extracted from an input AV stream, as management information for supervising the AV stream, and of generating PlayListMark, formed by marks pointing to a picture optionally specified by a user, from a reproduction domain corresponding to the PlayList defining the combination of preset domains in said AV stream; and

a step of recording said ClipMark and PlayListMark as respective independent tables on a recording medium.

14. A program for having a computer execute

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a step of generating ClipMark formed by a mark specifying a characteristic picture extracted from an input AV stream, as management information for supervising the AV stream, and of generating PlayListMark, formed by marks pointing to a picture optionally specified by a user, from a reproduction domain corresponding to the PlayList defining the combination of preset domains in said AV stream; and

a step of recording said ClipMark and PlayListMark as respective independent tables on a recording medium.

Please cancel claims 15-16

17. (Amended) The information processing apparatus according to claim 25 wherein said mark corresponding to ClipMark and said mark corresponding to said PlayListMark are represented by an address of a relative source packet corresponding to an entry point of said AV stream.

18. The information processing apparatus according to claim 17 wherein said mark of the ClipMark and said mark of the PlayListMark are represented by a first address of a relative source packet corresponding to an entry point of said AV stream and by a second address of an offset from said first address, respectively.

19. (Amended) The information processing apparatus according to claim 25 wherein said mark of said ClipMark includes a scene change point, a commercial start point, a commercial end point or a title displaying scene.

Please cancel claims 20-23

Please add the following new claims

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24. The information processing apparatus according to claim 1 wherein said PlayListMark further includes a mark specifying a Resume point in reproducing said PlayList.

25. An information processing apparatus for reproducing a recording medium having recorded thereon an AV stream, ClipMark formed by a mark pointing to a characteristic picture extracted from said AV stream, and PlayListMark, formed by a mark pointing to a picture optionally specified by a user, from a reproduction domain corresponding to PlayList defining the combination of preset domains in said AV stream, said information processing apparatus comprising:

reproducing means for reproducing said recording medium; and
control means for acquiring a recording position corresponding to said mark stated in the ClipMark or PlayListMark reproduced and for controlling said reproducing means responsive to the so acquired recording position.

26. The information processing apparatus according to claim 25 further comprising:

presentation controlling means for managing control to cause a list by a thumbnail picture associated with said PlayListMark to be presented to a user.

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27. An information processing method for reproducing a recording medium having recorded thereon an AV stream, ClipMark formed by a mark pointing to a characteristic picture extracted from said AV stream, and PlayListMark, formed by a mark pointing to a picture optionally specified by a user, from a reproduction domain corresponding to PlayList defining the combination of preset domains in said AV stream, said information processing method comprising:

a reproducing step of reproducing said recording medium; and
a controlling step acquiring a recording position corresponding to said mark stated in the ClipMark or PlayListMark reproduced and for controlling said reproducing step responsive to the acquired recording position.

28. A recording medium having recorded thereon a computer-readable program, for reproducing a recording medium having recorded thereon an AV stream, ClipMark formed by a mark pointing to a characteristic picture extracted from said AV stream, and PlayListMark, formed by a mark pointing to a picture optionally specified by a user, from a reproduction domain corresponding to PlayList defining the combination of preset domains in said AV stream, said computer-readable program comprising:

a reproducing step of reproducing said recording medium; and
a controlling step of acquiring a recording position corresponding to said mark stated in the ClipMark or PlayListMark reproduced and for controlling said reproducing means responsive to the acquired recording position.

29. A computer-readable program for reproducing a recording medium having recorded thereon an AV stream, ClipMark formed by a mark pointing to a characteristic picture extracted from said AV stream, and PlayListMark, formed by a mark pointing to a picture optionally specified by a user, from a reproduction domain corresponding to PlayList defining the combination of preset domains in said AV stream, said computer-readable program comprising:

a reproducing step of reproducing said recording medium; and

a controlling step of acquiring a recording position corresponding to said mark stated in the ClipMark or PlayListMark reproduced and for controlling said reproducing means responsive to the acquired recording position.

30. A recording medium having recorded thereon an AV stream, ClipMark formed by marks pointing to a characteristic picture extracted from an AV stream, and PlayListMark formed by a mark pointing to a picture optionally specified by a user, from a playback domain corresponding to PlayList defining the combination of preset domain in said AV stream.

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